ROMANIAN ACADEMY

School of Advanced Studies of the Romanian Academy (SCOSAAR)

BRIEF COURSE DESCRIPTION: 'STOCHASTIC PROCESSES AND MARTINGALES' 2018-2019

1. Data on the programme

| 1.1 Department | Exact Sciences | | | |
|---------------------|------------------|--|--|--|
| 1.2 Institution | Romanian Academy | | | |
| 1.3 Area of study | Mathematics | | | |
| 1.4 Course of study | Ph.D. | | | |

2. Data on the discipline

| 2.1 Name of disciplin | e | | Stochastic Processes and Martingales | | | | |
|------------------------------------|------|--------------|--------------------------------------|-------------|----|---------------------------|------|
| 2.2 Person giving the | lect | tures | Prof. Ph.D. Lucian Beznea | | | | |
| 2.3 Person teaching t | he s | eminars | Prof. Ph.D. Lucian Beznea | | | | |
| 2.4 Person teaching the laboratory | | | | | | | |
| activities | | | | | | | |
| 2.5 Year of study | I | 2.6 Semester | I | 2.7 Type of | E* | 2.8 Formative category of | DS** |
| | | | | assessment | | the course | |

3. Total estimated time (hours of teaching activities per semester)

| or rotal estimated time (notified teaching deti | our estimated time (nours of teaching activities per semester) | | | | |
|---|--|-------------|----|----------------|-------|
| 3.1 Number of hours per week | 4 | Of which: | | | |
| 3.2 lecture | 2 | 3.3 seminar | 2 | 3.4 laboratory | 0 |
| 3.5 Total hours in the curriculum | 56 | Of which: | | | • |
| 3.6 lecture | 28 | 3.7 seminar | 28 | 3.8 laboratory | 0 |
| Time fund distribution: | | | | | hours |
| Learning of the discipline using the text book, workbook, references (bibliography) and notes | | | | | 60 |
| Additional study in libraries, on specialized electronic platforms and by field observation | | | | | 100 |
| Preparation of seminars /laboratories, homework, reports, portfolios and essays | | | | | 100 |
| Tutoring work | | | | | 55 |
| Examinations | | | | | 4 |
| Other activities: | | | | | - |
| 20 T (11 | | | | | |

| 3.9 Total hours individual study | 319 |
|----------------------------------|-----|
| 3.10 Total hours per semester | 375 |
| 3.11 Number of credits | 22 |

4. 'Learning outcome' and specific skills

- 1. Learning of the lectures taught;
- 2. Ability to use the learning outcome in new contexts;
- 3. The knowledge and skills acquired within this discipline will ground future scientific research and teaching activities.

5. Assessment

| Type of | 5.1 Assessment criteria | 5.2 Assessment methods | 5.3 Share of the final grade | |
|---|-------------------------|------------------------|------------------------------|--|
| assessment | | | | |
| 5.4 Lecture | Acquired knowledge | Written examination | 65% | |
| 5.5 Seminar | Active participation | Oral examination | 35% | |
| 5.6 Laboratory | | | | |
| 5.7 Minimum performance standard: Knowing at least 70% of the information taught during the lectures | | | | |

Signature of person giving the lectures

Prof. Ph.D. Lucian Beznea

Signature of person teaching the seminars

Prof. Ph.D. Lucian Beznea

Signature of person teaching laboratory activities

^{*}E = Examination. C = Oral assessment.

^{**}DF = Basic Discipline. DS = Specialty Discipline.